

CompactLogix™

1769sc-IR6I

6-Channel Isolated RTD Input Module



The 1769sc-IR6I Input Module provides full channel-to-channel isolated RTD/Resistance input capability for noisy environments, in one I/O module. The 1769sc-IR6I module can replace Resistance/RTD modules without compromising performance or price.

Reduce System Costs

- Six channels of RTD/resistance (2-, 3-, and 4-wire).
- Eight input types.
- Supports most RTD input types.
- Measures resistance inputs from peripheral sensors.
- Individually programmable input type, open circuit detection, and high and low alarms for each channel.
- Easy to configure using RSLogix programming software.
- Channel-selectable filtering for fastest analog update time and noise rejection.
- Accuracy comparable with dedicated analog modules.

1769sc-IR6I Specifications

Input Types	6 RTD/Res					
Input Ranges RTD Resistance	100 ohm/200 ohm/500/1000 ohm: PT385/3916, 100 ohm: Ni618, 120 ohm Ni672, 604 ohm: NiFe518, 10 ohm: Cu426 0-150, 0-500, 0-1000, 0-3000 ohms					
Resolution	16 bits					
Advanced Features	6 filter frequencies (individually selectable by channel)					
Update Times (sec) *	4.17Hz	10 Hz	16.7 Hz	19.6 Hz	62 Hz	470 Hz
4-Channel Sample Time (sec)	0.244	0.100	0.060	0.051	0.020	0.006
Electrical Isolation (continuous)	125 VAC channel-to-channel isolation; 125 VAC field-wiring-to-backplane 125 VAC field-wiring-to-chassis-ground.					
Input Impedance	>500 kohm RTD <250 ohm, current					
Input Overvoltage Protection	±35 VDC continuous					
Maximum Cable Impedance	28 mA continuous					
Backplane Current Required	190 mA at 5 V maximum , 35 mA at 24 V maximum					
Common Mode Rejection	110 dB at 50/60 Hz					
Normal Mode Rejection	65 dB at 50/60 Hz					
Environmental Conditions Operational Temperature Storage Temperature Relative Humidity	-0 °C - 60 °C (32 °F - 140 °F) -45 °C - 85 °C (-49 °F - 185 °F) 5% - 95% (non-condensing)					
Thermal Dissipation	3.00 Watts, maximum					
Certifications	UL/cUL Listed ANSI ISA 12.12.01 (Class I, Div 2, Groups ABCD), CE					
Recommended Cable	For TC inputs: shielded, twisted-pair TC extension wire; For RTD, mV, V, or mA inputs: Belden 8761 or equivalent					